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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/066,109

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EXAMINER

PARDO, THUY N

ART UNIT

PAPER NUMBER

2165

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/22/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/066,109

Applicant(s)

MCNEIL, DANIEL D.

Examiner

Thuy N. Pardo

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's Amendment filed on November 21, 2006 in response to Examiner's Office Action has been reviewed. Claims 1-24 are pending in the application. Claims 1 and 13 are amended. This Office Action is Final.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Myers et al. (Hereinafter "Myers") EP Application 0410630 A2 in view of Beavin et al. (Hereinafter "Beavin") US Patent No. 6,038,569.

As to claim 1, Myers teaches a method for backing up data in a computer system from at least one primary data source to a secondary data source [first recorded on the backup medium (log) is then written to its external storage address, page 3, lines 12-13; ab], comprising:

performing a full file backup in disk order on a plurality of data blocks stored by the at least one primary data source [full backup, pages 1-2; page 6, lines 3-4];

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initiating an incremental backup at a predetermined interval [begin the backup cycle, page 5, lines 1-8], the incremental backup including file system metadata [see metadata on table on page 6, lines 45-57]; and

comparing a modification time of each file/folder at the predetermined interval to a defined time, the file system metadata including each modification time [see metadata on table on page 6, lines 45-57] wherein if the modification time is earlier than the defined time, then excluding data blocks of that file/folder from the incremental backup the time since the last backup has elapsed of 7 days and instant date is earlier than defined date, then the file need not to be backup again, pages 6-7, particular lines 25-33; page 5, lines 1-30].

However, Myers does not explicitly teach that the full file backup is an image file although it has the same functionality of fully file backing up and recovery. Beavin teaches that the full file backup is a full image backup file [see the abstract; fig. 2-5; col. 3, lines 38 to col. 4, lines 58].

Therefore, it would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to add image backups of Beavin to the system of Myers as an essential means to facilitate recovery of loss or damages from full or incremental image copies.

As to claim 13, Myers and Beavin teach the invention substantially as claimed. Myers further teaches comparing a modification time of each file/folder at the predetermined interval to a defined time, wherein if the modification time is later than the defined time, then including data blocks of that file/folder in the incremental backup [pages 6-7, particular lines 1-9; page 5, lines 1-30].

As to claim 2, Myers and Beavin teach the invention substantially as claimed. Beavin further teaches that the defined time is a time when the full image backup was performed [timestamp of the corresponding page, col. 6, lines 18-23].

As to claim 3, Myers and Beavin teach the invention substantially as claimed. Myers further teaches that the defined time is a time when the last incremental backup was performed [date of last backup, page 3, lines 40-43].

As to claim 4, Myers and Beavin teach the invention substantially as claimed. Myers further teaches that the defined time is one of the first times when the full backup was performed and a second time when a last incremental backup was performed, whichever is the more recent [for object D: last backup date is 7/13/89 and last change date is 7/1/89. lines 45-57 on page 6].

As to claim 5, Myers and Beavin teach the invention substantially as claimed. Myers further teaches determining whether a system clock has been changed [page 5, lines 47 to page 6, lines 6].

As to claim 6, Myers and Beavin teach the invention substantially as claimed. Myers further teaches that if the system clock has been changed, then returning to performing the full image backup on the plurality of data blocks [page 2, lines 24-34].

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As to claim 7, Myers and Beavin teach the invention substantially as claimed. Myers further teaches that if the system clock has not been changed, then initiating the incremental backup at the predetermined interval [page 7, lines 1-37].

As to claim 8, Myers and Beavin teach the invention substantially as claimed. Myers further teaches that if the system clock has not been changed, then comparing the modification time of each file/folder at the predetermined interval to the defined time [page 7, lines 1-37].

As to claim 9, Myers and Beavin teach the invention substantially as claimed. Beavin further teaches that the incremental backup includes file system metadata, thereby allowing the tracking of new, changed, renamed, and linked files/folders [col. 1, lines 37-67].

As to claim 10, Myers and Beavin teach the invention substantially as claimed. Beavin further teaches that the full backup and the incremental backup are used to provide a point-in-time disaster recovery [508, 510 of fig. 5].

As to claim 11, Myers and Beavin teach the invention substantially as claimed. Beavin further teaches that the full image backup and the incremental backup are used to keep a standby machine up-to-date as of a last backup [fig. 4; col. 5, lines 6 to col. 6, lines 40].

As to claim 12, Myers and Beavin teach the invention substantially as claimed. Beavin further teaches that the full image backup and the incremental backup are written directly over a

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network to a standby machine and recovered, thereby keeping the standby machine up-to-date as of a last backup [image copy data set, 110 of fig. 1; col. 4, lines 59 to col. 5, lines 15].

As to claims 14-24, all limitations of these claims have been addressed in the analysis of claims 1-13 above, and these claims are rejected on that basis.

Response to Arguments

3. Applicant's arguments filed on November 21, 2006 have been fully considered but they are not persuasive.

Applicant argues that Myers fails to disclose or suggest performing a full backup as recited in claim 1.

As to this point, Examiner respectfully disagrees. Myers teaches a FULL/INCREMENTAL backup in which the backup intervals are 7 and 30 days [see page 6, lines 16-28] wherein the total amount of backup data created during the time period between two consecutive full-volume backups using the FULL/INCREMENTAL backup policy [see page 6, lines 16-56].

Applicant argues that Beavin does not teach an incremental backup.

Examiner respectfully disagrees. Beavin teaches the invention substantially as claimed, comprising forming a full/ incremental image copy and a full image file recovery [see col. 1, lines 10-11; 502-510 of fig. 5] by comparing the timestamp of the current page with the timestamp of the corresponding page from the primary data structure [see the abstract; col. 5, lines 53 to col. 6, lines 28].

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy N. Pardo whose telephone number is 571-272-4082. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

February 16, 2007

A handwritten signature in black ink, consisting of a series of loops and a long horizontal stroke extending to the right.